conductor; [, that around the first layer there is arranged] a solid insulating layer surrounding the first layer; [part (7), and that around the insulating part there is arranged] a second layer [(8)] with semiconducting properties surrounding the insulating layer.

Claim 2 (Amended), line 2, delete "characterized in that" and insert --wherein--; delete "(6)".

Claim 3. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the second layer [(8) is arranged in such a way that it essentially constitutes] comprises an equipotential surface surrounding the conductor[/conductors].

Claim 4. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the second layer [(8)] is [connected] connectable to earth potential.

Claim 5. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the first and second semiconducting layers [(6,8)] and the insulating layer [part (7)] have substantially the same coefficient of thermal expansion such that, upon a thermal movement in the winding, defects, cracks or the like do not arise in the boundary layer between the semiconducting layers and the insulating part.

Claim 6. (Amended) A power transformer/reactor according to claim 1, wherein the first and second layers have respective contact surfaces secured to

corresponding surfaces of the adjacent insulating layer [one or more of the preceding claims, characterized in that] each of the semiconducting layers [(6,8)] is secured to the adjacent solid insulating layer [part (7)] along essentially the whole [adjoining] contact surface.

Claim 7. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the at least one winding[/windings is/are designed in the form of] comprises a flexible cable.

Claim 8. (Amended) A power transformer/reactor according to claim 7, [characterized in that] wherein the cable is manufactured with a conductor area which is between about 30 and 3000 $mm^2$ and with an outer cable diameter which is between about 20 and 250 mm.

Claim 9. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein at least one of the first and second layers and the solid insulation [(7) are formed by] comprise polymeric materials.

Claim 10. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the winding is free of partial discharge [first layer (6) and/or the second layer (8) are formed by polymeric materials].

Claim 11. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the solid insulation [(7) has been obtained by] comprises an extrusion.

Claim 12. (Amended) A power transformer/reactor according to claim 1, wherein [one or more of the preceding claims, characterized in that] the current-carrying conductor [(4)] comprises a first plurality [number] of strands[, said strands] being insulated from each other and a second plurality of strands being [except a few strands that are] uninsulated in order to secure electric contact with the first semiconducting layer [(6)].

Claim 13. (Amended) A power transformer/reactor according to claim 1, wherein the cable is substantially void free [one or more of the preceding claims, characterized in that at least one of the strands of the conductor (4) is uninsulated and arranged in such a way that electrical contact is achieved with the inner semiconducting layer].

Claim 14. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the power transformer/reactor comprises a core [consisting] of magnetic material.

Claim 15. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the power transformer/reactor comprises an iron core [consisting of] including core limbs and yokes.

Claim 16. (Amended) A power transformer/reactor according to claim 1[-13, characterized in that] wherein the power transformer/reactor is air wound and formed without an iron core [(air-wound)].

Claim 17. (Amended) A power transformer/reactor according to claim 1, further comprising at least two galvanically separated concentrically wound windings [according to any preceding claim, characterized in that the windings are concentrically wound].

#2 cont.

Claim 18. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the power transformer/reactor is [connected to two or more] connectable to a plurality of voltage levels.

Claim 19. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the windings include terminals in the form of [the high and/or low-voltage winding are jointed to a power cable and/or made similar to] power cable [termination(s)] terminations.

Claim 20. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the insulation layer is formed of a solid electrical insulation, substantially all of the electrical insulation in the transformer/reactor is enclosed between the conductor [(4)] and the second layer [(8)] of the windings [and which insulation is in the form of solid insulation].

Claim 21. (Amended) A power transformer/reactor according to claim 1, wherein the cable includes means for sustaining a high voltage at transmission levels including at least one of greater than 10kV, 36kV, 75.5kV, 400 kV and 800 kV [one or more of the preceding claims, characterized in that the winding thereof is designed for high voltage, suitably in excess of 10 kV, in particular in excess of 36 kV, and preferably more than 72,5 kV and up to very high transmission voltages, such as 400 kV to 800 kV or higher].

A2 cont.

Claim 22. (Amended) A power transformer/reactor according to [one or more of the preceding claims, characterized in] claim 1, wherein the transformer/reactor is designed for a power range in excess of at least 0.5 MVA[, preferably in excess of] and 30 MVA.

Claim 23. (Amended) [The cooling of a] A power transformer/reactor according to [one or more of the preceding claims, characterized in that] claim 1, wherein the power transformer/reactor includes cooling means comprising at least one of [is cooled with] liquid and[/or] gas [on] at earth potential.

Claim 24. (Amended) A method for electric field control in a power transformer/reactor comprising forming a magnetic field generating circuit having at least one winding with at least one electrical conductor [and] an insulation layer and at least one outer layer [present] externally thereof, [characterized in that] wherein the insulation is formed by a solid insulation material and [that an outer layer is provided externally of the insulation,] said outer layer being connected to ground or

otherwise a relatively low potential and having an electrical conductivity [being] higher than the conductivity of the insulation but lower than the conductivity of the electrical conductor so as to [function for equalization of] equalize potential and cause the electrical field to be substantially enclosed in the winding internally of the outer layer.

Claim 25. (Amended) A method [in production of a power transformer/reactor] according to claim 24, wherein [one ore more of the preceding claims, characterized in that] a flexible cable is used as a winding and [that] the winding of the cable to form the winding[/windings] of the transformer/reactor is assembled on-site.

Please add new claims 26-38 as follows:

--26. A method according to claim 24, further comprising connecting the outer layer to near ground potential.

27. A high voltage electric machine comprising at least one of a transformer and reactor including a winding in the form of a cable including at least one current-carrying conductor and a magnetically permeable, electric field confining cover surrounding the conductor, said cable forming at least one uninterrupted turn in the corresponding winding of said machine.

28. The machine of claim 27, wherein the cover comprises an insulating layer surrounding the conductor and an outer layer surrounding the insulating layer, said outer layer having a conductivity sufficient to establish an equipotential surface around the conductor.

29. The machine of claim 27, wherein the cover comprises an inner layer surrounding the conductor and being in electrical contact therewith; an insulating layer surrounding the inner layer and an outer layer surrounding the insulating layer.

30. The machine of claim 29, wherein the inner and outer layers have semiconducting properties.

31. The machine of claim 27, wherein the cover is formed of a plurality of layers including an insulating layer and wherein said plurality of layers are substantially void free.

32. The machine of claim 27, wherein the cover is in electrical contact with the conductor.

33. The machine of claim 27, wherein the layers of the cover have substantially the same temperature coefficient of expansion.

34. The machine of claim 27, wherein the machine is operable at 100% overload for two hours.

35. The machine of claim 27, wherein the cable is operable free of sensible end winding loss.

36. The machine of claim 27, wherein the winding is operable free of partial discharge and field control.

37. The machine of claim 27, wherein the winding comprises multiple uninterrupted turns.

38. The machine of claim 27, wherein the cable comprises a transmission